WO 00/77101 31 PCT/FR00/01636

- => perfluoroalkylated amino alcohol sulfonate,
- => perfluoroalkylated acrylate.
- 8. The composition of claim 4, <u>characterized in that</u> said additives each bear a polymer chain compatible with the binder.
- 9. The composition of claim 8, <u>characterized in that</u> said additives are statistical copolymers having blocks or grafts that bear sequences or grafted components compatible with the binder.
- 10. The composition of claim 8, <u>characterized in that</u> said additives are copolymers of at least one monomer compatible with the binder and of at least one phosphonated monomer.
- 11. The composition of claim 8, <u>characterized in that</u> said monomer compatible with said binder is chain-polymerizable and is selected from methacrylic acrylic, styrene, vinyl chloride, vinyl fluoride and vinyl ester monomers.
- 12. The composition of claim 8, <u>characterized in that</u> said monomer compatible with said binder is selected from polycondensable monomers, diols and epoxide diacids.
- 13. The composition of claim 8, <u>characterized in that</u> it includes phosphonic acid groups.
- 14. The composition of claim 4, <u>characterized in that</u> the reactivity additive is a phosphonate or a phosphate whose molecular chains are either hydrocarbonated, fluorinated or chlorofluorinated.
- 15. The composition of claim 14, <u>characterized in that</u> said reactivity additive includes at least one component selected from:
- => alkyl acid phosphones and phosphonates,
- => phosphoric acids,
- => aminotrimethylene phosphonic acid,
- => 1-hydroxyethylidene-1-1-diphosphonic acid,
- => ethylene diamine tetramethylene phosphonic acid,
- => hexamethylene diamine tetramethylene phosphonic acid,
- => diethylene triamine pentamethylene phosphonic acid.

WO 00/77101 30 PCT/FR00/01636

## **CLAIMS**

- 1. A method for protecting metal articles against corrosion, characterized in that it consists in applying to the metal articles directly, i.e., without prior treatment of any kind, a composition formed, at the least, of a film-forming binder, at least one corrosion-inhibiting additive reactive with metal, and at least one oligomer additive bearing phosphonic acids.
- 2. The method of claim 1, <u>characterized in that</u> metal articles to be treated whose surfaces are excessively oxidized but not scaled are subjected to coarse brushing to reduce their surface oxidation to a low value that is not necessarily zero, and the composition is then applied to them.
- 3. The method of claim 1, <u>characterized in that</u> metal articles to be treated whose surfaces are excessively greasy are subjected to coarse cleaning to reduce their surface grease to a low value that is not necessarily zero, and the composition is then applied to them.
- 4. A composition for protecting metal articles against corrosion, comprising a binder and at least one additive, <u>characterized in that</u> it includes a film-forming binder, at least one corrosion-inhibiting additive reactive with metal, and at least one oligomer additive bearing phosphonic acids.
- 5. The composition of claim 4, <u>characterized in that</u> it further includes one or more pigment additives.
- 6. The composition of claim 4, <u>characterized in that</u> it further includes one or more wetting agents.
- 7. The composition of claim 4, <u>characterized in that</u> it contains a wetting agent formed of at least one component selected from the following:
- => ethoxylated alkyl and aryl phosphonates,
- => fluorocarbon derivatives,
- => perfluoroalkylated ammonium sulfonate,
- => perfluoroalkylated potassium sulfonate,